For providing a larger screen size for a display device, organic EL display devices driven in an active matrix driving mode are contemplated in addition to those of the simple matrix driving mode. The display device of this mode is such one that replaces the anode lines and cathode lines with scanning signal lines and data signal lines, respectively, and thin film transistors (TFT) are used for switching elements arranged at respective intersections.

Respective pixels are applied with currents by switching associated thin film transistors, causing organic EL elements to emit light. For TFT, an element made of p-Si, a-Si can be employed.

Alternatively, MOS-FET (Metal Oxide Semiconductor Field Effect Transistor) may be used to form TFT.

For example, with MOS-FET as a switching element, two reverse conducting regions are formed on a semiconductor substrate, for example, a Si substrate. A silicon oxide (SiO₂) thin film and a metal gate electrode are sequentially deposited on the surface of the substrate between the inverse conductive regions. The conductivity on the surface of the substrate is controlled by an electric field applied from the metal gate. Therefore, a Si wafer is required for a display substrate, and a semiconductor substrate is required for a polysilicon substrate and so on. In addition, since an inorganic material must be deposited on such substrates, high temperature processes are typically used for its manufacturing.

IN THE CLAIMS:

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Kindly cancel claims 2, 6 and 16 without prejudice or disclaimer.